The Quantum View of the World
- Nonlocality and the Kochen-Specker Paradox -

DAMTP Cambridge May 1988

Transparencies:

1a) 3 rows of observables not in an eigenstate

2. What does measurement do

2a How is the Change brought about?

13. Kochen-Specker result + FUNC

1. The Sum Rule

1b. Angular momentum in QM

4. The Kochen-Specker Paradox (Spin) example)

5 The Two-Colour Theorem

6 Two-Colour Theorem in 2 dimensions

17b Belinfante's Proof the Two-Colour Theorem

17a The Kochen-Specker Diagram

13y Func contd ; Decidabilization - Func*

13a Proof of Func

14. Definition of $[A_B]^{\phi}$ & $[A_B]^{\phi}(e)$

14a Locality theorem DLOC

14c ELOC

16 Kalkbrenner - Heywood result

Func* + VR + ELOC + DLOC —
⇒ Church-Turing

Statement of VR.

14d Definition of $\{[\Phi \Psi]\}^{\phi}_{\{\langle A,B\rangle\}}(D,E)$

15 DLOC as ELOC in types

17 CVR.

18 CVR. In relativized systems

19 In comparability of CVR as locality

19a Proof contd of Func*'s

8 Principle of Local Contradictory Definitions (PCD)